



SEQUENCE LISTING

<110> Dhugga, Kanwarpal S.

Wang, Xun

Bowen, Benjamin A.

<120> COMPOSITIONS AND METHODS FOR MANIPULATING GUM
PRODUCTION IN PLANTS

<130> 035718/184402 5718-55

<140> 09/374967

<141> 1999-08-16

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<170> PatentIn Ver. 2.0

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<212> DNA

<213> Zea mays

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<223> Nucleotide sequence for the maize GDP-mannose
pyrophosphorylase gene

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 <223> Amino acid sequence for the maize GDP-mannose
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 Lys Asp Phe Glu Asp Lys Leu Gly Ile Thr Ile Thr Cys Ser Gln Glu
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 Thr Glu Pro Leu Gly Thr Ala Gly Pro Leu Ala Leu Ala Arg Asp Lys
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 Gly Gly Glu Ala Thr Ile Met Val Thr Lys Val Asp Glu Pro Ser Lys
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 Tyr Gly Val Val Val Met Glu Glu Ala Thr Gly Arg Val Glu Arg Phe
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 Val Glu Lys Pro Lys Ile Phe Val Gly Asn Lys Ile Asn Ala Gly Ile
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 Tyr Leu Leu Asn Pro Ser Val Leu Asp Arg Ile Glu Leu Arg Pro Thr
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Tyr Ala Met Val Leu Pro Gly Phe Trp Met Asp Val Gly Gln Pro Arg
 210 215 220

Asp Tyr Ile Thr Gly Leu Arg Leu Tyr Leu Asp Ser Ile Arg Lys Lys
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Val His Glu Ser Ala Lys Ile Gly Glu Gly Cys Leu Ile Gly Pro Asp
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Val Ala Ile Gly Pro Gly Cys Val Val Glu Asp Gly Val Arg Leu Ser
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Arg Cys Thr Val Met Arg Gly Val Arg Ile Lys Lys His Ala Cys Ile
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Ser Asn Ser Ile Ile Gly Trp His Ser Thr Val Gly Gln Trp Ala Arg
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Ile Glu Asn Met Thr Ile Leu Gly Glu Asp Val His Val Cys Asp Glu
 325 330 335

Val Tyr Ser Asn Gly Gly Val Val Leu Pro His Lys Glu Ile Lys Ser
 340 345 350

Ser Ile Leu Lys Pro Glu Ile Val Met
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